

MarkdownGS

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Introduction

MarkdownGS is a translator module for Babelfish by Seven Hills Systems (<http://speccie.uk/software/babelfish>) that converts markdown text formats to other Babelfish supported formats. Markdown is a light-weight markup language for creating formatted text using a plain text-editor. Babelfish is an NDA (New Desk Accessory) for the the Apple IIgs System 6+ which allows the conversion from one compatible file format to another (text->text, graphic->graphic, etc). MarkdownGS acts as both an import translator as well as an export translator, so it is now possible to edit files on you Apple IIgs and display them on other computers as they were meant to be seen.

Goals

The main goal of MarkdownGS is to allow the importing and exporting of markdown formatted files and have the output look the same as the original intended it to look. Unfortunately, due to the limited functionality of the Apple IIgs toolset, that goal cannot be 100% completed. What can be completed is something that is as close we can come to as a reproduction of the original. MarkdownGS supports all the basic syntax of the markdown language except for the image and link elements.

Installation

To install MarkdownGS copy the MarkdownGS translator file to the :System:SSH.Babelfish folder of your boot volume and reboot. You must have previously installed the Babelfish NDA along with its other supported translators.

Using MarkdownGS

MarkdownGS requires a Babelfish friendly application to invoke the functionality of MarkdownGS. Fortunately Babelfish comes with a "Convert" NDA which will allow a

user to choose and import a file in one format and export the contents to another format. Since Markdown is a text file format, then the source and destination file formats must be text formats. Specturm(tm) by Ewen Wannop can also be used to import and export text file formats. You can also use my ORCA shell utility (<https://github.com/vavruska/babelfishCLI>) to convert files. Refer to the application software documentation for how to use the Babelfish functionality.

Importing

The Markdown language does not include any sort of font information, such as font face or font size. Instead it refers to sizes as header 1,2,3,4,5,6 or normal text. In order for MarkdownGS to import a markdown file you must tell it what font size on the Apple IIGS to use when it sees a particular markdown size. The default font sizes are 36,30,27,24,20,18 for the headers 1-6 and 12 for normal text. The default font face is Helvetica.

Import Options

Using the Import Options button from the Babelfish import file dialog you can change the defaults.

****Use SIS Fonts for defaults ****- If you have the SIS fonts installed, then you can choose to use those as the default. The SIS fonts have been optimized for usage on the Apple IIGS using smaller font sizes. When using the SIS fonts you can not change the font sizes.

Text Font - Change the font used when converting a markdown file to a GS specific formatted file.

Font Sizes - Change the font size used when displaying a header or normal text.

Indent Style

- Certain Markdown elements cause the text to be indented. The default is to use 8 spaces for indents but you can choose to use a single tab, as well 2,4,6 or 8 spaces.

Exporting

Like importing, Export must know what font sizes found in a document should be converted to the appropriate markdown header size. All font sizes that do not match an Export header size will match as normal text.

Export Options

Using the "Export Options" dialog, you can choose which font size converts to a particular markdown header size.

Show Export Translate Window - The Babelfish status dialog is only shown during the import phase. MarkdownGS exports in two phases. The first phase is to gather all the text and style data from the original file. The second phase is to write out the data using the markdown formatting. After importing is completed the status dialog is closed. Enabling this option (default) shows a status dialog which displays the progress of the second phase of exporting.

Use Same Font Sizes as Importing - Enabling this option (default) tells MarkdownGS to use the same font sizes that are defined in the import settings.

Font Sizes - Defines the font sizes that are used for the header sizes.

****End of Line Format ****- Different operating systems use different characters or combination of characters for their line ending. Using this option you can select which line ending you should use when exporting files. The choices are Apple (default), Linux/Unix or Windows.

****Indent Detect Count ****- The number of spaces entered at a start of a line to signify an indent. Used when using multiple levels of lists. Multiples of this count is used for multiple levels. Also used for block quotes.

Preparing a document for exporting

When you import a Markdown document the formatting is pretty straight forward and can easily be converted when importing a document. Exporting is not as straight forward. Here are some things you need to do to make sure your file exports as you expect it to.

Font Sizes

Font size changes are not always easily seen and a rogue font size change can produce a Markdown file that has a different appearance even when re-importing back into a GS formatted file. While exporting, if a font size is detected that does not match one of the heading font sizes then it will be treated as normal text. Be sure to only use the font sizes that are defined as the header sizes.

Lists

Ordered and unordered lists can start on column zero of a document, but in order to detect an indent it must contain a single tab or the correct number of spaces. The correct number of spaces can be chosen in the Babelfish Export options. The correct number of spaces defaults to 8 as it seems to work well with the Helvetica font.

Block Quotes

In order for text to be detected as a block quote it must start with the correct number of spaces and have a background color of yellow. The yellow is used in place of the vertical bars used on markdown viewers on other platforms.

Code/Code Blocks

Text that is using the monospaced fonts Courier or SIS3, and a have yellow background, will be treated as a code with entire lines being treated as a code block. Code may not have any other font style changes.

What does MarkdownGS understand?

Since most Apple IIGS editors use the Text Edit tool for displaying and editing text, not all styles and text formatting are available. Markdown GS can import and export the following formats types:

Header 1

Header 2

Header 3

Header 4

Header 5

Header 6

Bold Text

Italic Text

Horizontal lines (74 underscores)

Ordered Lists

1.
Item 1
2.
Item 2
 1. Sub Item 1
 2. Sub Item 2
3.
Item 3

Unordered Lists

- ¥
Item 1
 - ¥ Sub Item 1a
 - ¥ Sub Item 1b
- ¥
Item 2

Block Quotes

Blockquote Text must have a yellow background
More Block quote 8 spaces to create another nest
More text after a blank

Inline Code

This is an

Code Blocks

Open Source Notice

MarkdownGS is open source and can be found at <https://github.com/vavuska/markdownGS>.

MarkdownGS includes the open source tool md4c (<http://github.com/mity/md4c>) to handle the importing of markdown formatted files.

Building MarkdownGS from source

MarkdownGS was developed in a Linux environment using the GSplus emulator and the GoldenGate Apple IIgs compatibility layer by Kelvin Sherlock (<https://juiced.gs/store/golden-gate/>). It includes a Makefile, and some tinkering will be needed to build on other operating systems.

Unfortunately, MarkdownGS can not be built on an Apple IIgs due to an artificial 32K limitation inside the resource compiler. If someone were to fix this limitation or create, then use the included ORCA shell file build.

Thanks

Thanks go out to Jeremy Rand who's original version of md2teach (<https://github.com/jeremysrand/md2teach>) inspired me to write the MarkdownGS translator and also to release it as open source.

End of readme

